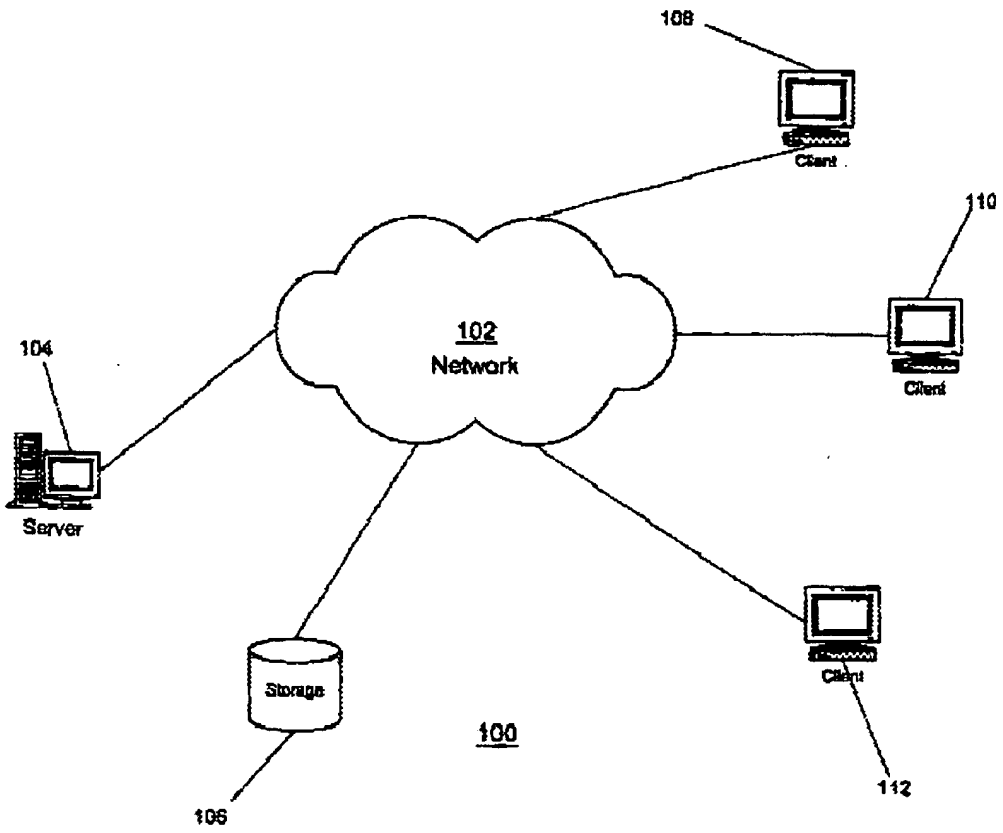

108
Client
110
102
Network
104
Client
Server
Storage
100
112
106

Figure 1

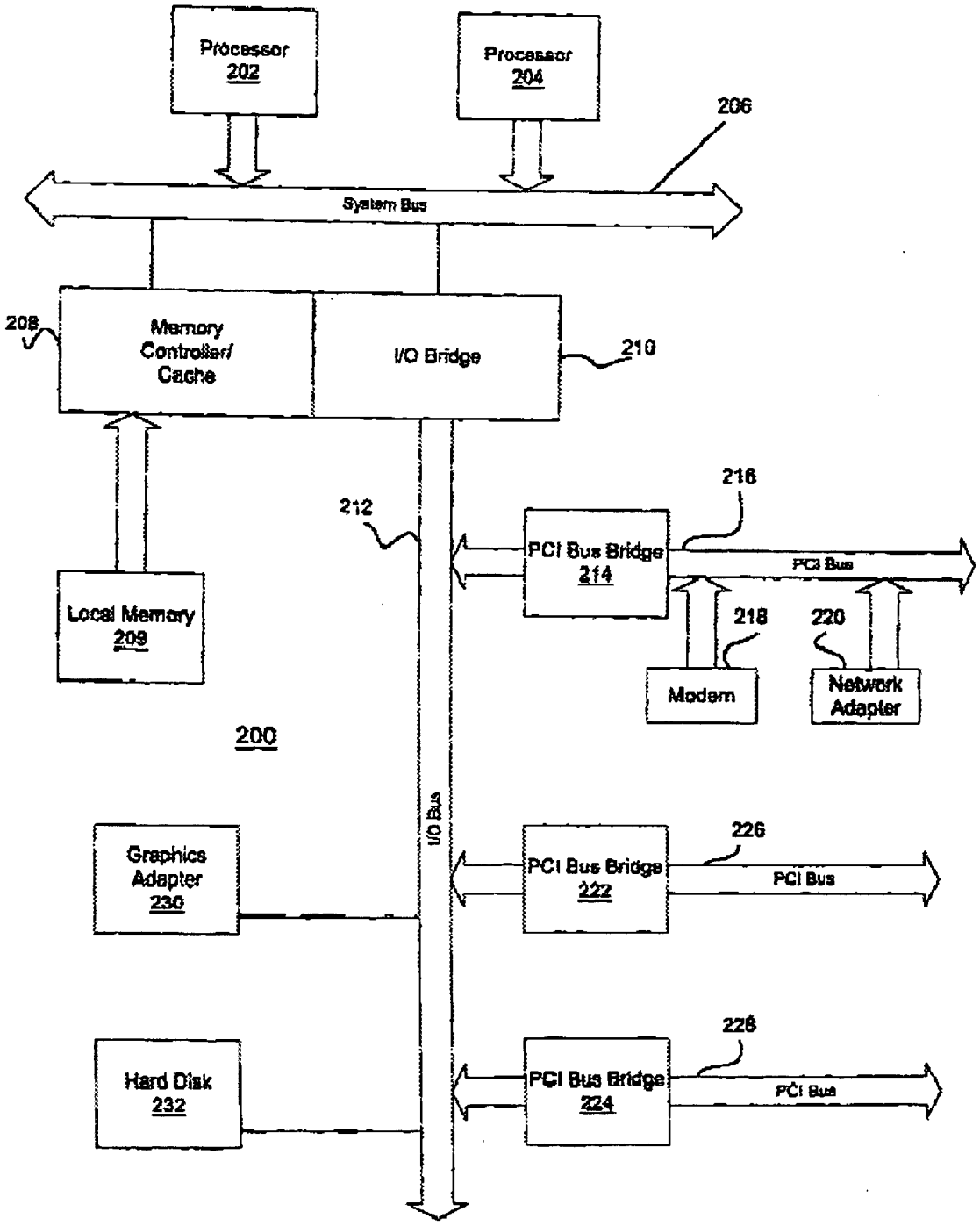
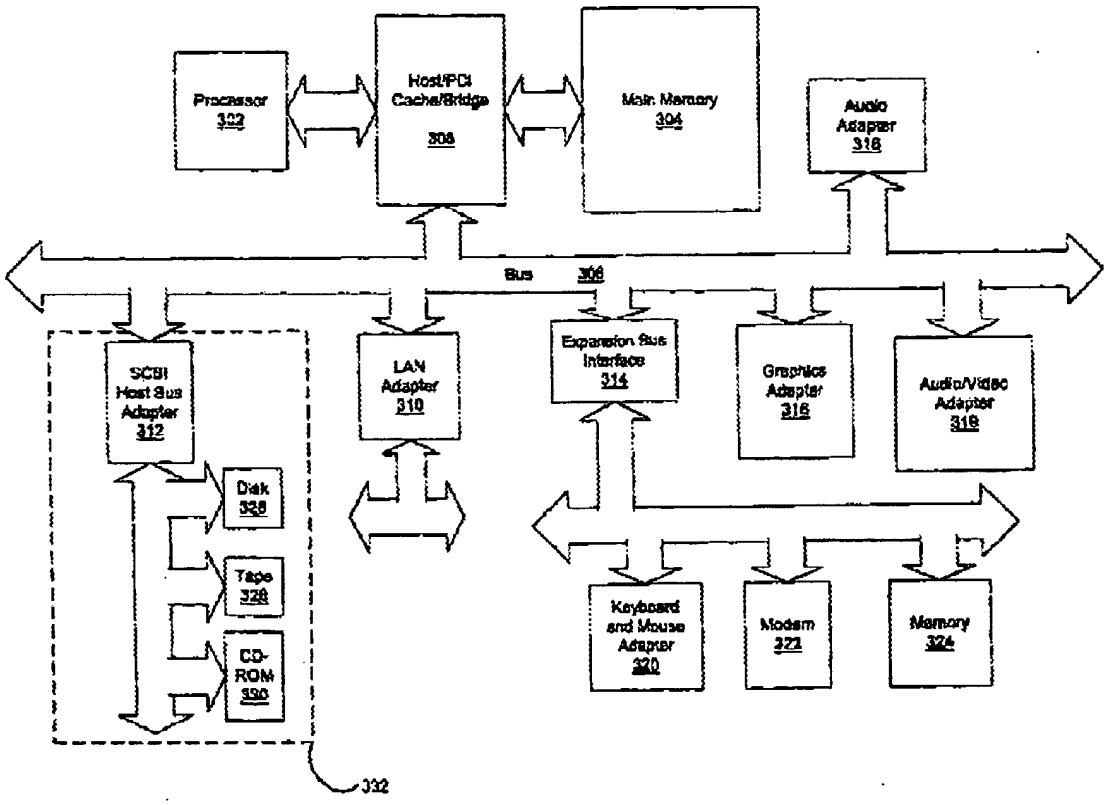

Processor
202
Processor
204
206
System Bus
208
Memory
Controller/
Cache
I/O Bridge
210
212
216
PCI Bus Bridge
214
PCI Bus
Local Memory
209
218
220
Modem
Network
Adapter
200
I/O Bus
Graphics
Adapter
230
226
PCI Bus Bridge
222
PCI Bus
Hard Disk
232
228
PCI Bus Bridge
224
PCI Bus

Figure 2


Processor
302
Host/PCI
Cache/Bridge
306
Main Memory
304
Audio
Adapter
316
Bus 308
SCSI
Host Bus
Adapter
312
LAN
Adapter
310
Expansion Bus
Interface
314
Graphics
Adapter
316
Audio/Video
Adapter
318
Disk
326
Tape
328
CD-
ROM
330
Keyboard
and Mouse
Adapter
320
Modem
322
Memory
324
332

300

Figure 3

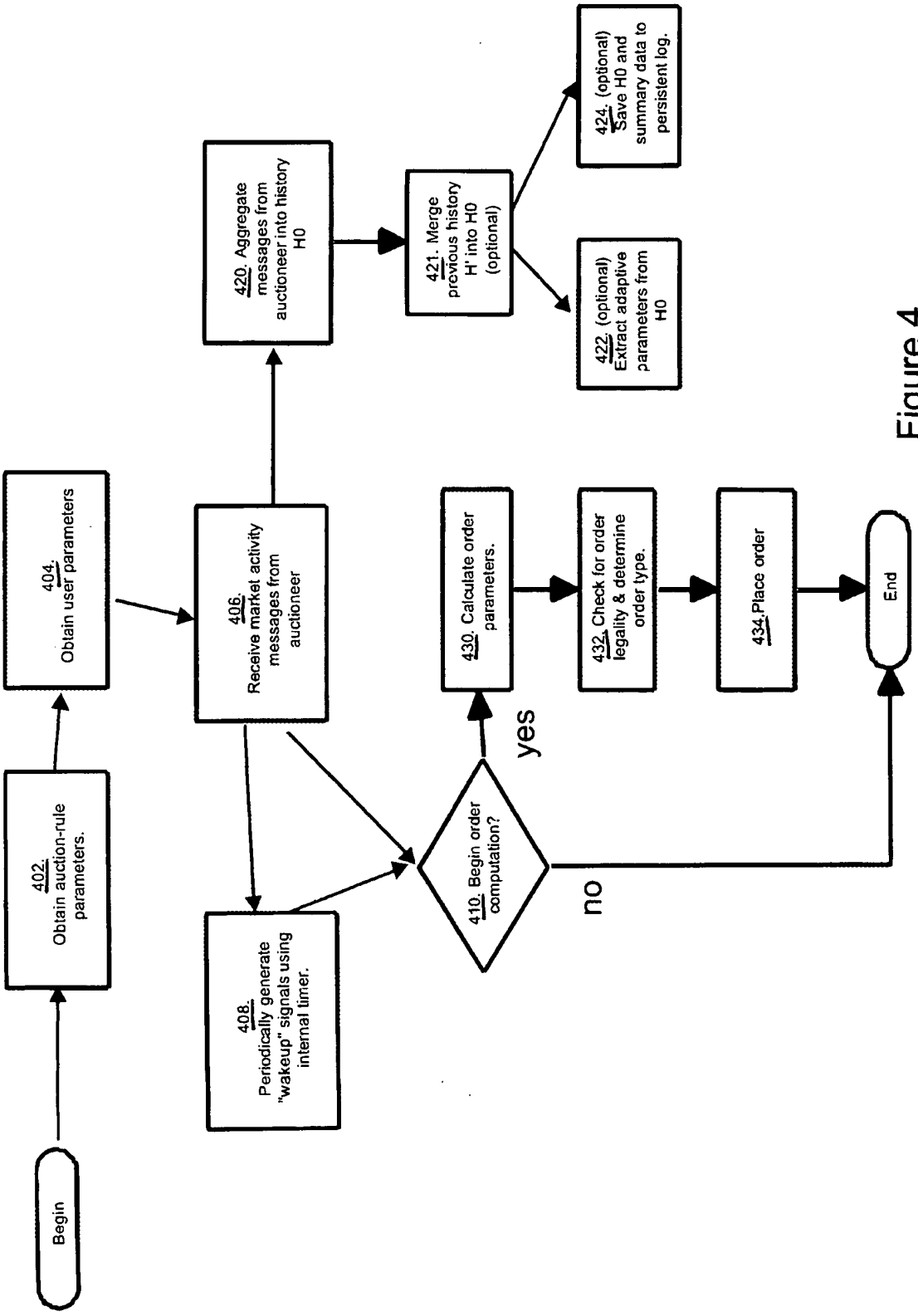

Begin
402. Obtain auction-rule parameters.
404. Obtain user parameters
406. Receive market activity messages from auctioneer
408. Periodically generate "wakeup" signals using internal timer.
410. Begin order computation?
yes
no
420. Aggregate messages from auctioneer into history H0
421. Merge previous history H' into H0 (optional)
422. (optional) Extract adaptive parameters from H0
424. (optional) Save H0 and summary data to persistent log.
430. Calculate order parameters.
432. Check for order legality & determine order type.
434. Place order
End

Figure 4.

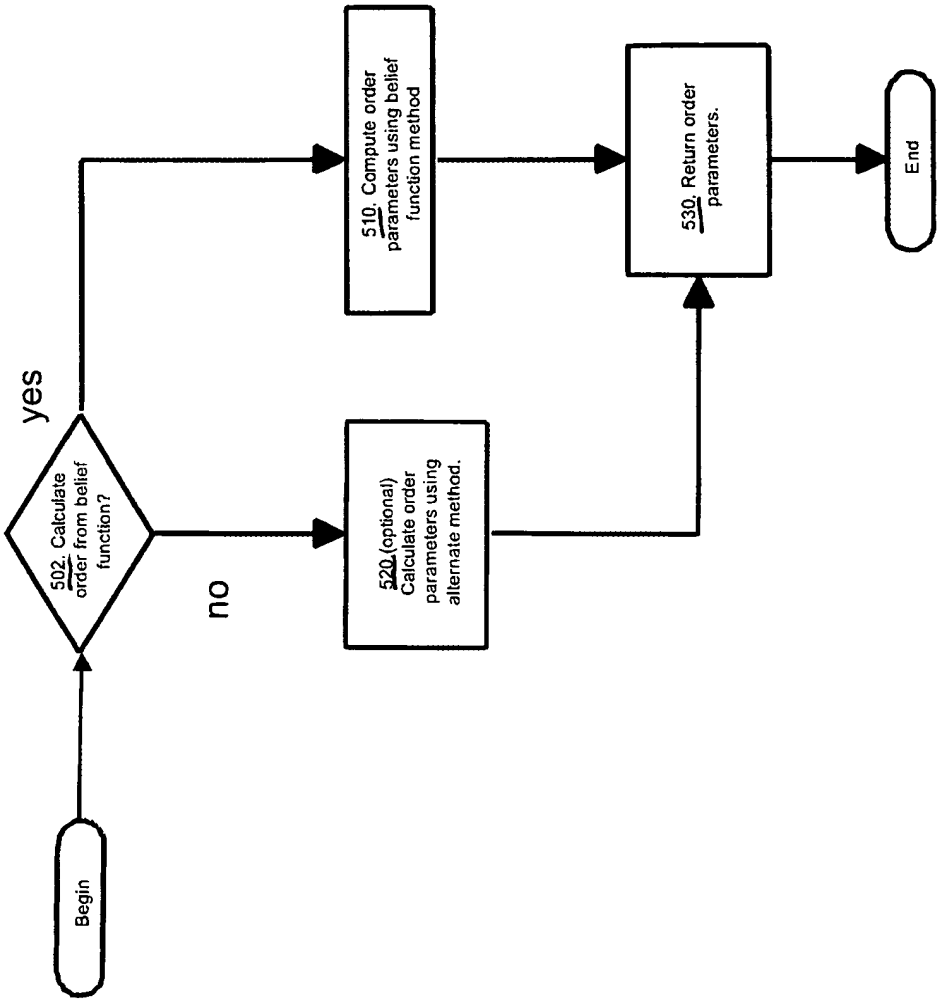

Begin
502. Calculate order from belief function?
yes
no
510. Compute order parameters using belief function method
520 (optional) Calculate order parameters using alternate method.
530. Return order parameters.
End

Figure 5.

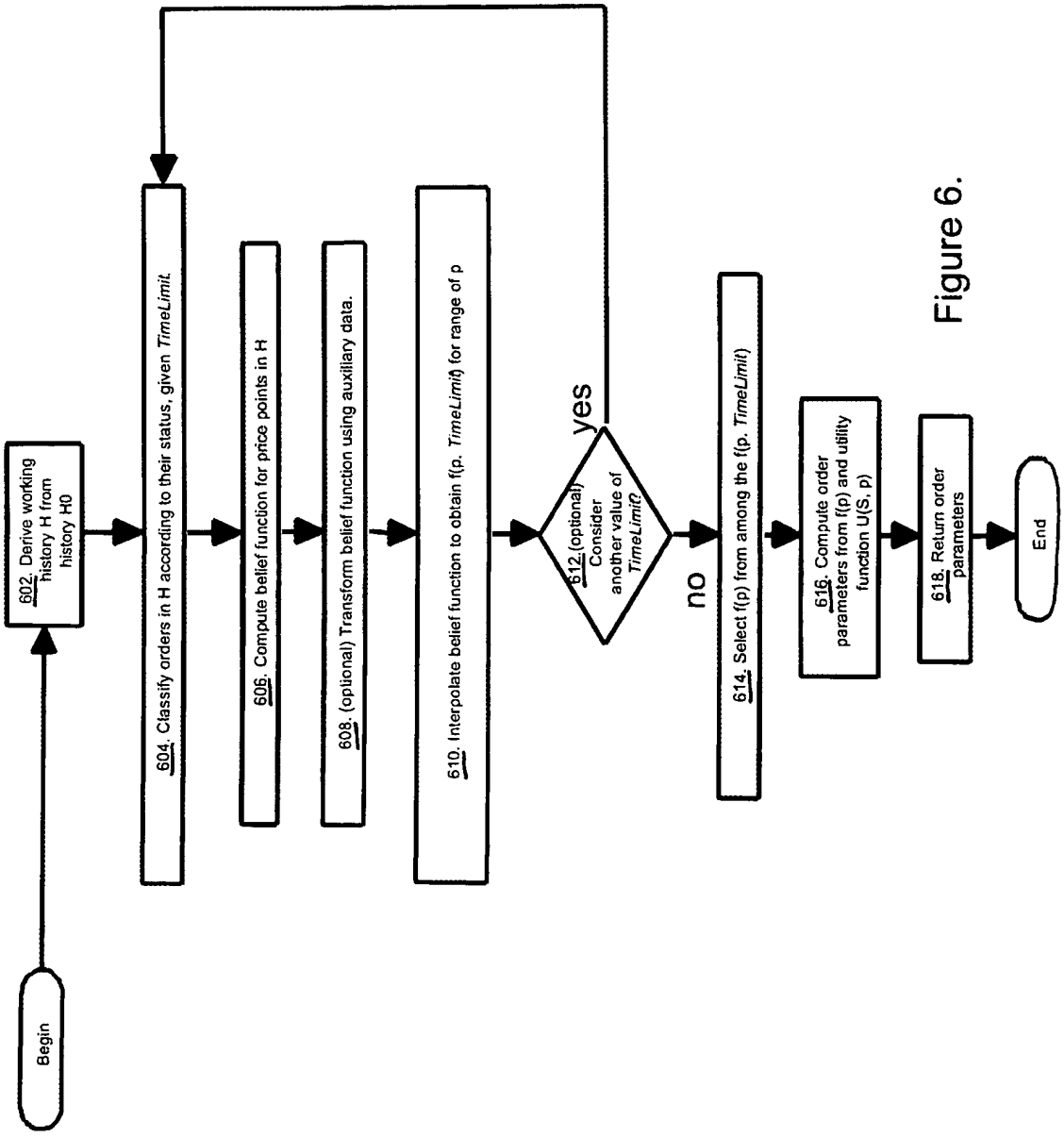

Begin
602. Derive working history H from history H0
604. Classify orders in H according to their status, given TimeLimit.
606. Compute belief function for price points in H
608. (optional) Transform belief function using auxiliary data.
610. Interpolate belief function to obtain f(p, TimeLimit) for range of p
612. (optional) Consider another value of TimeLimit?
yes
no
614. Select f(p) from among the f(p, TimeLimit)
616. Compute order parameters from f(p) and utility function U(S, p)
618. Return order parameters
End

Figure 6.